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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,013	09/12/2003	Geert Matthys	920522-94795	8589
23644	7590	09/15/2005	EXAMINER	
BARNES & THORNBURG P.O. BOX 2786 CHICAGO, IL 60690-2786			KOVAL, MELISSA J	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 09/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

ix

**Office Action Summary**

Application No.

10/662,013

Applicant(s)

MATTHYS ET AL.

Examiner

Melissa J. Koval

Art Unit

2851

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 July 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities:

The title on page 1 of the specification is missing letters. This same objection to the title is made in the previous Office Action of March 17, 2005. With respect to Applicant's comments on page 9 of his remarks, the Examiner is attaching a copy of the page in question for Applicant's convenience. The problem may have occurred in scanning, however it is requested that Applicant address the scanned record as it appears.

Appropriate correction is required.

The substitute specification filed July 18, 2005 has not been entered because it does not conform to 37 CFR 1.125(b) and (c) because:

- (a) The statement as to lack of new matter under 37 C.F.R. 1.125(b) is missing.
- (b) A marked-up copy of the substitute specification has not been supplied with the clean copy.

### ***Drawings***

The drawings were received on July 18, 2005. These drawings are approved.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 through 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Buckley et al. U.S. Patent 5,969,756.

See Figure 1, for example, and THE BACKGROUND OF THE INVENTION, column 1, lines 19 through 37, of '756.

Claim 1 sets forth: "A test pattern generator (test pattern generator 26) for alignment of a projected light from at least one projector onto a screen, comprising (See electronic display device 12 including CRT assemblies and television sets or computer monitors and column 4, lines 25 through 35.):

a plurality of directed light sources (Optical sensors 16 generate video image signals.), the test pattern generator having a surface (test fixture 14), each light source being moveably fixed on the surface and being individually adjustably settable such that a direction of light emitted from each light source can be set for directing light from the light source onto the screen." See column 4, lines 36 through 52. With respect to the addition of the limitation "individually" to the claim, also see column 8, lines 11 through 50 and column 10, lines 49 through 67. Individual movement is clearly addressed by these sections as applied to the rejection of claim 5 in the previous Office Action.

Claim 2 sets forth: "The test pattern generator of claim 1, wherein the surface is provided by a sheet material and movement of each light source puts the sheet material into plastic deformation." See wobulator 18 and column 4, lines 33 through 35.

Claim 3 sets forth: "The test pattern generator according to claim 2, wherein the sheet material is made from a material which does not work harden." There is no

suggestion in the teaching of Buckley et al. ('756) that test fixture 14 supporting wobulator 18 deteriorates in performance over time.

Claim 4 sets forth: "A method of adjusting directed light sources for generating a test pattern for alignment of a projected light from at least one projector onto a screen, the light sources being mounted on a surface, the method comprising moving the light sources in at least two different directions to thereby set the direction of light emitted from each light source individually." Again consider the remarks applied in the rejection of claim 1 above and again refer to Figures 2A through 2C, for example, and columns 5 and 6, in their entirety, as applied in the previous office action. Also see the section "Calibration of the Wide-Angle Cameras" described in column 7, lines 12 through 67, and column 8, lines 1 through 9. Note that the correlation of CCD cameras 58 of array 56 that comprise test fixture 14 have a direct correlation to calibration grid 130 as described in columns 7 and 8.

Claim 5 sets forth: "A method of aligning a projector, comprising projecting onto a screen a test pattern comprising a plurality of discrete image components, the position of each image component being individually settable, and adjusting at least one projector with respect to at least one of convergence, geometry, adjacent geometry and overlapping geometry using the test pattern." See column 4, lines 53 through 67; column 8, lines 11 through 50 and column 10, lines 49 through 67.

***Response to Arguments***

Applicant's arguments filed July 18, 2005 have been fully considered but they are not persuasive. Claims 1 through 5 were rejected under 35 U.S.C. §102 as being anticipated by Buckley et al. U.S. Patent 5,969,756 in the previous Office Action and that rejection is essentially reiterated above in view of the amendments to claims 1 and 4.

The Examiner thanks Applicant for the summary of Buckley et al. '756 found on the bottom of page 9 and the top of page 10 of Applicant's remarks. However, the Examiner asserts that Buckley et al. '756 give a more comprehensive and pertinent teaching with respect to Applicant's claims than Applicant's summary suggests.

The first full paragraph on page 10 of Applicant's remarks state the following:

"The test pattern generator according to '756 is an electronic device feeding test patterns to an electronic display device under control of a computer, see '756 column 4, lines 41-43. The test pattern generator according to '756 does not comprise adjustable light sources as recited in the attached claim 1. A light source is a source of light. '756 refers to optical sensors. An optical sensor receives light and generates an electronic signal therefrom. A light source generates light."

The examiner asserts that optical sensors 16 are sources of light. Applicant's specification does not give a special definition for the requirements of his light source and therefore the Examiner believes the limitations of Applicant's claims are met. In

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addition to those sections of '756 applied in the rejection of the claims, see column 3, lines 20 through 28, of '756 wherein the following is set forth:

a test fixture including a frame supporting a plurality of close-up optical sensors to sense and produce image signals corresponding to small areas of images displayed on said electronic display device and a plurality of wide-angle optical sensors behind said close-up optical sensors for sensing and producing image signals corresponding to large areas of images displayed on said electronic display device;

From there the Examiner directs Applicant to column 9, lines 10 through 57, "Color purity/Vertical Raster Shift/Yoke Rotation" and particularly the following:

phors in the electronic display device. The alternating symmetrical deflection of the electron beams in relation to the phosphor dots or phosphor stripes in the electronic display device result in equal reduction of emitted light intensity provided the electron beams are aligned with the center of the phosphor dots or stripes when no magnetic field is generated by the wobulator 18. Any difference in light intensity is an indication of discrepancy in beam landing.

Following this, the horizontal coils of wobulator 18 (if included) are simultaneously energized to generate a symmetrical alternating horizontal magnetic field which encompasses the electronic display device and deflects vertically, the electron beams impinging upon the phosphor dots or stripes in the electronic display device.

In the second full paragraph on page 2 of Applicant's remarks, the following is stated:

"It would appear that the Examiner starts from the test pattern display device according to '756 being an electronic device for transforming received electronic video image signals into optical images. In this interpretation of the claim the CRT screen or similar which is to be tested would have to be the test pattern generator. However even if this interpretation is accepted, claim 1 requires that each light source of a plurality of light sources can be adjustably set such that the direction of light emitted from each light source can be set individually. In the

system of '756 only the complete CRT device or similar can be adjusted in its position of the conveyor belt. The wobulator 18 also only has an effect on the complete CRT device – see column 9, lines 28 to 58. Thus the wobulator does not set the direction of each of the light sources. '756 does not disclose the feature that each light source of a plurality of sources is adjustable individually as to the direction of light it emits. Thus, the subject matter of original claim 1 is not anticipated by the cited prior art reference '756."

The Examiner does not agree with Applicant's remarks regarding her interpretation of claim 1. The Examiner believes that the limitations of claim 1 are met for the reasons already given in the body of the rejection and that the Examiner's remarks herein clarify why the teaching '756 meet the limitations of claim 1. The Examiner's rejection of newly amended claim 4 further solidifies the Examiner's position.

Although the Examiner thanks Applicant for his comments on pages 10 and 11 to the cited, but not applied references, Yamasaki et al. '451 B1 and Ejiri et al. '171 B1, respectively, the Examiner does not understand why Applicant has associated those references to the rejection of claims 1, 4 and 5 as they are not applied under statutes. Furthermore, Applicant discusses on page 11, why the rejection of the claims under Buckley et al. '756 is not obvious. As an obvious rejection was never applied, these remarks are not necessary nor are they persuasive with respect to the rejection of claims 1 through 5 as set forth above.



***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Harshbarger U.S. Patent 4,533,950 teaches a method of testing the linearity of a raster scan.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK

*Melissa Jan Korz*  
*Melissa Jan Korz*



*Approved  
MST  
9/12/05*

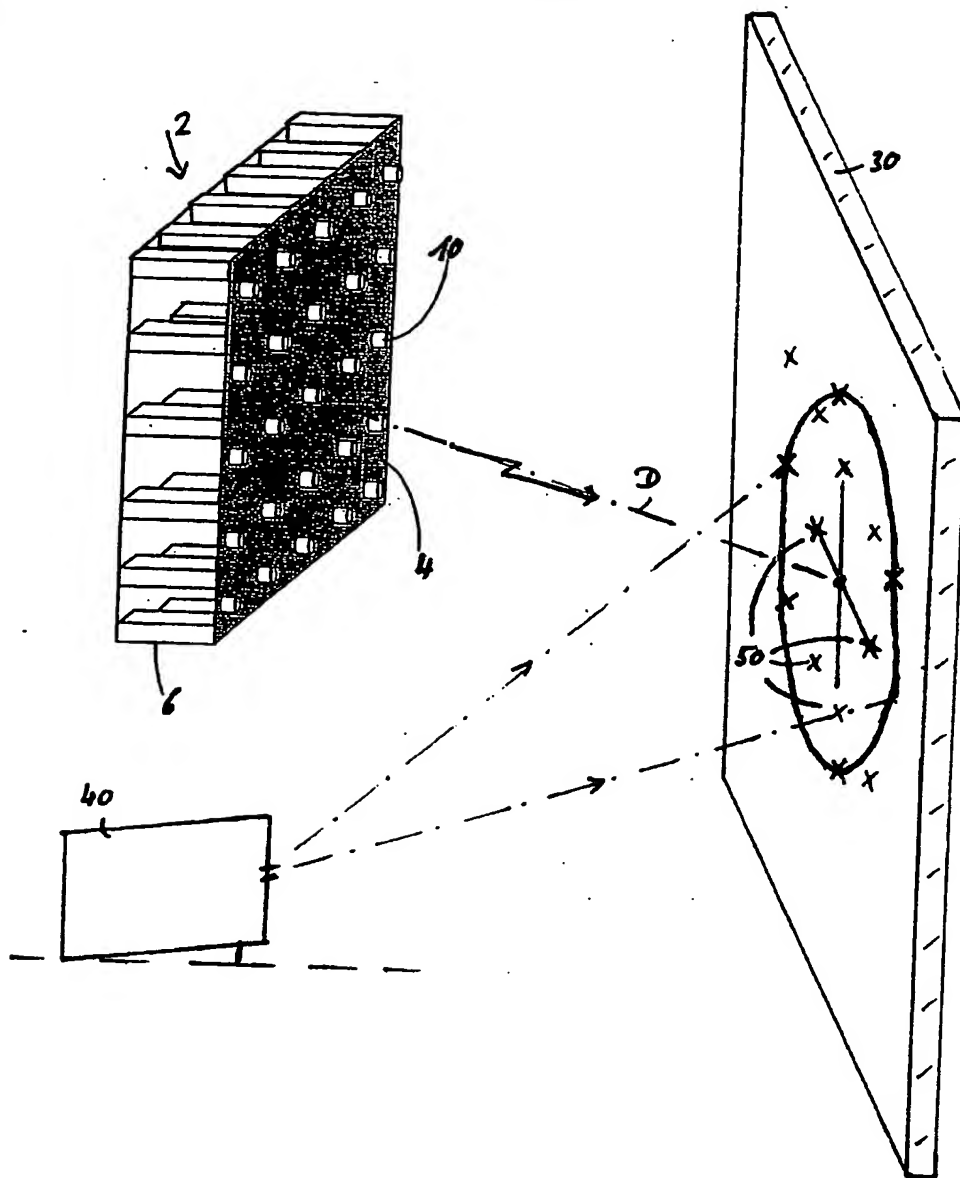


Fig. 1

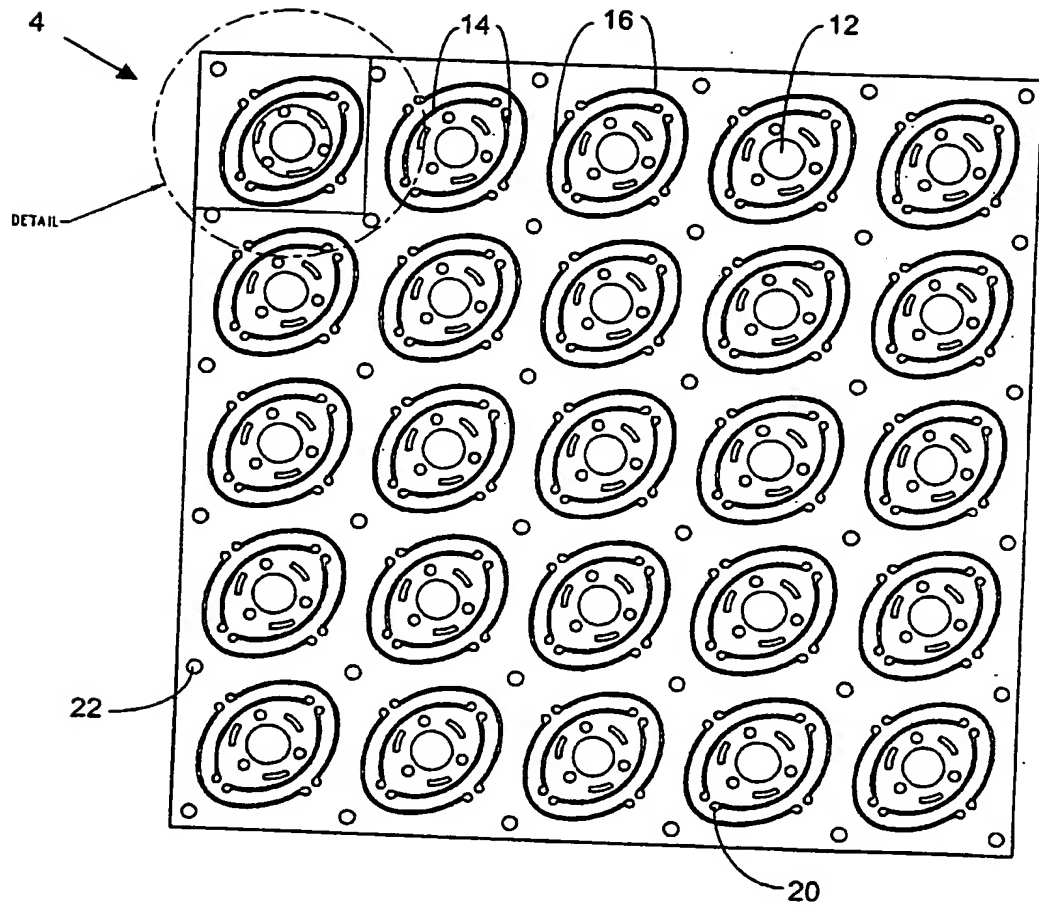


Fig. 2

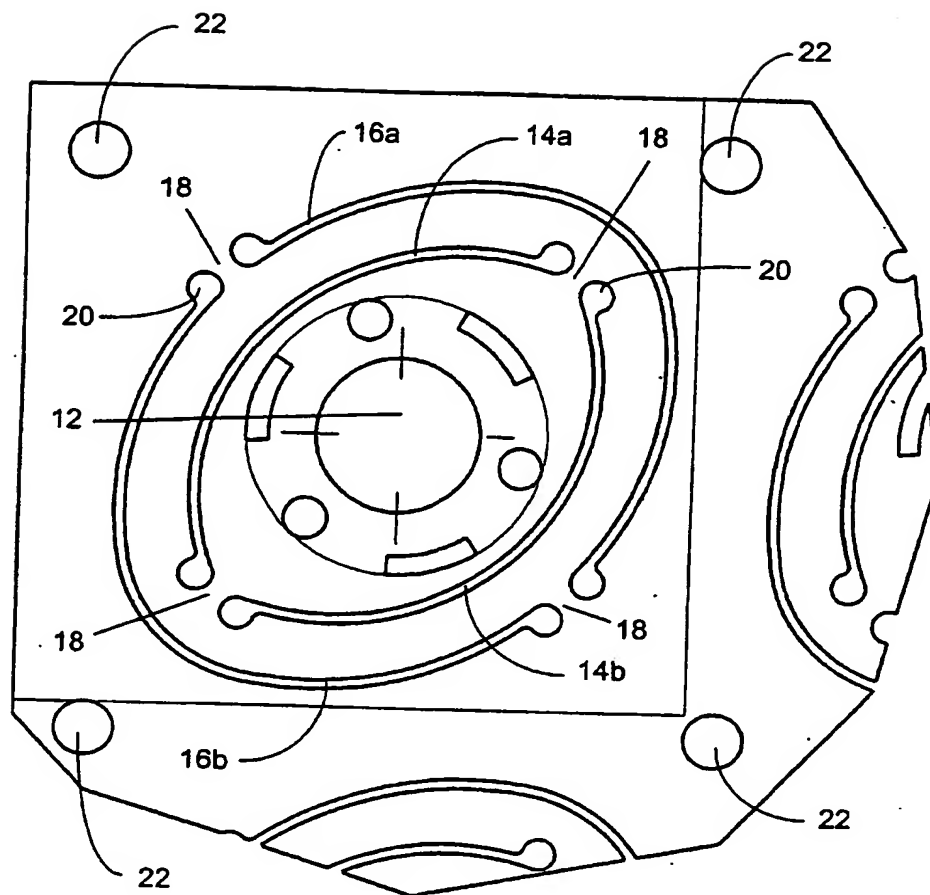


Fig. 3